

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of:

SOUTH CAROLINA ELECTRIC AND)
GAS COMPANY, et al.)
(Virgil C. Summer Nuclear)
Station, Unit 1))

Docket No. 50-395-OL

APPLICANTS' STATEMENT OF MATERIAL
FACTS AS TO WHICH THERE IS NO GENUINE ISSUE
TO BE HEARD RESPECTING INTERVENOR,
BRETT A. BURSEY'S CONTENTION A10

1. Intervenor, Brett A. Bursey's Contention A10 assumes that radiation releases during normal operation will be within 10 CFR Parts 20 and 50 limits; that releases associated with the uranium fuel cycle will be as represented by the values set forth in Table S-3 of 10 CFR Part 50. (Order admitting contentions April 24, 1978)
2. The Nuclear Regulatory Commission ("NRC") Staff's Draft Environmental Statement ("DES") has examined the radiological impacts associated with normal operation of the facility. See Sections 4.5 and 4.7. Applicants have reviewed this information and concluded that it is conservative. See attached Affidavits of James H. Barker and Leonard D. Hamilton.
3. The calculated dose commitments to the population within 80 km from the operation of the facility (in man-rems per year) are set forth in DES Table 4.9. Applicants have reviewed these values and concluded that they are conservative. See attached Affidavit of James H. Barker.

4. The annual total-body population dose commitments in the year 2000 to the U.S. population (in man-rem) is set forth in DES Table 4.11. Applicants have reviewed these values and conclude that they are conservative. See attached Affidavit of James H. Barker.

5. The population doses associated with routine operation of the facility, as set forth in the DES, are very small compared to natural background doses and are well within the limits set forth in 10 CFR Parts 20 and 50. See attached Affidavit of Leonard D. Hamilton.

6. The projected occupational radiation exposure impact associated with the operation of the facility is estimated to be 500 man-rem per year. See DES Section 4.5.2.3. Applicants have reviewed this value and conclude that it is conservative. See attached Affidavit of James H. Barker.

7. The uranium fuel cycle release values attributable to the facility are set forth in DES Section 4.7. These values are as set forth in Table S-3 to 10 CFR Part 50. 8. The proposed evidentiary support for Intervenor, Brett A. Bursey's Contention 10A is found in the following documents:

- a. Cancer And Low Level Ionizing Radiation, Karl Z. Morgan.
- b. Hazards Of Low-Level Radiation, Karl Z. Morgan.
- c. Low-Level Radiation And The General Public, Chapter IV, Karl Z. Morgan.

- d. Nuclear Madness, Chapters 2, 3 (the section entitled Nuclear Reactors pp. 30-39), 4, pp. 71-74, Helen Caldicott.
- e. Long Term Health Hazards Of The Fuel Cycle, Chapter II, Dr. Kaku.
- f. Honicker v. Hendrie. A proceeding before the NRC [sic] 1978, Docket No. 78-3371-NA-CV [described as an "additional response."

9. With respect to items referenced in paragraph 7, the central thesis or underlying premise of such documents can be stated as follows: low level radiation not only causes cancer and genetic damage, but may indeed be even more harmful than higher doses per unit of exposure.

10. The effects of low level radiation have been considered by biomedical, biostatistical and epidemiological experts for some years. The Advisory Committee on the Biological Effects of Ionizing Radiation ("BEIR"), Division of Medical Sciences, National Academy of Sciences issued a report in 1972 entitled The Effects of Populations of Exposure to Low Levels of Ionizing Radiation. The BEIR report, while noting that the lower bounds of risk from exposure to low level radiation could include zero, made what the authors considered was the conservative assumption, followed by standard setting bodies for many years, that the linear proportional dose and tumor induction observed at much higher doses and dose rates can be extrapolated down to the lowest doses. See attached Affidavit of Leonard D. Hamilton.

11. The Commission in Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), CLI-80-31, 12 NRC 264, 277 (1980) endorsed the use of the BEIR report.

12. The NRC Staff, utilizing, inter alia, the BEIR report concluded that, in terms of radiation-induced health impact on man arising from normal operation of the facility, there will be no significant or measurable health impact on man from routine operation of the plant. DES Section 4.5.5.

13. The NRC Staff, utilizing, inter alia, the BEIR report also concluded that both the dose commitments and health effects of the uranium fuel cycle are insignificant when compared to dose commitments and potential health effects to the U.S. population resulting from all natural background sources. DES Section 4.7.5.

14. Applicants, utilizing, inter alia, the BEIR report conclude that the health effects associated with routine operation of the facility and the uranium fuel cycle are insignificant. See attached Affidavit of Dr. Leonard S. Hamilton.

15. Given the insignificant nature of the health effects associated with routine operation of the facility and those associated with the uranium fuel cycle, it cannot be said that such should weigh heavily in the benefit-cost balance.